

From: Ferree, Melissa A. (DNREC) <melissa.ferree@state.de.us>
Sent: Friday, May 01, 2015 7:48 AM
To: rogers, rick
Subject: FW: Update on EPA action to address complaint regarding fuel cell desulfurization units.

Rick,

Below are the questions we still have for Bloom. They are broken into two categories: (1) those that we have already asked and are still awaiting a response and (2) those that have arisen recently and have not previously been posed to Bloom.

Old Questions (still awaiting response):

1. How frequently is each individual canister replaced (i.e., how much gas throughput until the canister is removed and approximate length of time that takes)?
2. What factors are used to determine when the canisters will be replaced?
3. What is the weight of an empty desulfurization canister?
4. What is the total weight of the contaminated media inside the canister?
5. An explanation as to why:
 - a. Bloom originally believed they only needed to ship 2 canisters with no additional shipments required for a period of 6-9 months, but then followed with a request for 4 temporary EPA ID numbers, with 2 of those sites being large quantity generators.
 - b. Two months following the request for temporary site identification numbers, Bloom requested permanent EPA ID numbers for the same 4 sites.
6. The SHWMS remains interested in further understanding the waste handling and recycling practices at the Newark location.

New Questions:

1. It was stated that 35% of the media in the desulfurization canister is copper, which is sent for reclamation. What percentage of the copper is recovered from the media?
2. Bloom provided Manifest 005798808JJK to demonstrate the waste removed from the canister in Texas is managed as hazardous waste. Was the copper recovered from this waste at Unicat or was it sent directly to Clean Harbors for management?
3. Please provide land disposal restriction notifications for each of the shipments that occurred under the 4 temporary EPA ID numbers.
4. For manifests 014135604JJK, 014135601JJK, 014135603JJK, and 014135605JJK, please provide the number of canisters that were shipped using each manifest.
5. For manifests 014135604JJK, 014135601JJK, 014135603JJK, and 014135605JJK, what do the original weights indicate? (i.e., was the weight of each canister estimated or was an actual weight used on the manifest?)
6. Please provide an explanation of what happened to the canisters on manifests 014135604JJK, 014135601JJK, 014135603JJK, and 014135605JJK between leaving Delaware and arriving at US Ecology in Robs Town, Texas (TXD069452340). This should include an explanation of each repacking step along the route and its necessity.
7. On manifests 014135604JJK, 014135601JJK, 014135603JJK, and 014135605JJK, the hazardous waste management code is listed as H132 (landfilling). Was the copper recovered/reclaimed prior to landfilling?

I assume you won't get into enough detail during the May 8th meeting to address most of these questions, but I wanted to share all of our questions at this point. The first 4 are the ones we can't seem to get nailed down regarding the spent desulfurization units.

If you have any questions, please don't hesitate to let me know.

Thanks,
Melissa

From: Marker, Nancy C. (DNREC)
Sent: Thursday, April 30, 2015 5:13 PM
To: Ferree, Melissa A. (DNREC)
Cc: Crofts, Marjorie A. (DNREC); JAnthony, Karen (DNREC)
Subject: FW: Update on EPA action to address complaint regarding fuel cell desulfurization units.

Melissa,

Rick asked for our additional unanswered questions. He would like to take them to the May 8th meeting. Please provide them to him.

Barnes and Betsy will both be at the meeting.

Nancy

From: rogers, rick [<mailto:rogers.rick@epa.gov>]
Sent: Thursday, April 30, 2015 4:48 PM
To: Marker, Nancy C. (DNREC)
Cc: Pratt, Stacie; Kinslow, Sara
Subject: Update on EPA action to address complaint regarding fuel cell desulfurization units.

Dear Nancy:

Thank you for the information provided on our phone call about the citizen complaint EPA received regarding natural gas desulfurization units at the Diamond State Generation plant. EPA has begun to look into the basis of the complaint. I sent a request for information to the regions in which similar units are supposedly in use to find out if other regions have received a similar complaint and to find out if the regions or their states have looked into the management of the spent desulfurization filter units. I spoke to colleagues from EPA Regions 4 and 8 while at the ASTSWMO meeting and they were not aware of these types of units nor knew if their states have any knowledge of them. I also spoke with EPA Headquarters managers and indications are that EPA, with the information we have, are likely to consider that the manufacturing process unit exemption will not apply to these spent desulfurization filter units.

I found out late yesterday that Bloom Energy has scheduled a meeting with EPA's Office of Resource Conservation and Recovery for Friday, May 8th to discuss the issue of management of their spent desulfurization units. I or someone from EPA Region 3 will also be attending that meeting.

I will keep you all informed as we gather more information during the investigation of this complaint.

Let me know if you have any questions.

Thanks,

Rick

Rick Rogers, Associate Director
Office of State Programs (3LC50)
Land and Chemicals Division
U.S. EPA Region 3
1650 Arch Street
Philadelphia, PA 19103
Tele: 215.814.5711
Fax: 215.814.3163
rogers.rick@epa.gov